Notice of Allowability	Application No.	Applicant(s)	
	09/893,357	DICKMAN ET AL.	
	Examiner	Art Unit	
	Tracy Dove	1745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *interview of 12/21/04*.

2. ☒ The allowed claim(s) is/are *1-56 and 58-86*.

3. ☒ The drawings filed on *07 September 2004* are accepted by the Examiner.

4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date *attached* .
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with David D'Asenzo on 12/21/04.

The application has been amended as follows:

1. (Currently Amended) A fuel processing system, comprising:

a fuel processor having a reforming region;

a feedstock delivery system adapted to deliver a feed stream containing a predetermined mix ratio of feedstock components to ~~a~~ the fuel processor, the feedstock delivery system comprising:

a water delivery assembly adapted to provide a stream comprising liquid water;

a carbon-containing feedstock delivery assembly adapted to provide a stream comprising a liquid carbon-containing feedstock; ~~and~~

a reservoir adapted to receive a volume of liquid water and a volume of liquid carbon-containing feedstock from the water and the carbon-containing feedstock delivery assemblies;

a sensor assembly associated with the reservoir and adapted to detect at least one triggering event related to the quantity of one or more of the feedstock components in the reservoir; and

wherein the feedstock delivery system is adapted to regulate the flow of the streams comprising the liquid water and the liquid carbon-containing feedstock at least partially in response to the detection of the at least one triggering event by the sensor assembly to produce ~~an at least substantially liquid~~ the feed stream containing a predetermined mix ratio of the liquid water and the liquid carbon-containing feedstock; and

~~a~~ wherein the fuel processor ~~having a reforming region and~~ is adapted to produce a product stream containing hydrogen gas from the feed stream.

2. (Original) The fuel processing system of claim 1, wherein the sensor assembly is adapted to detect a first triggering event related to the quantity of a first one of the water or the carbon-containing feedstock delivered to the reservoir, and a second triggering event related to the quantity of either a second one of the water or the carbon-containing feedstock or the total amount of water and carbon-containing feedstock delivered to the reservoir.

3. (Original) The fuel processing system of claim 2, wherein each of the triggering events includes a measurable event in which a predetermined threshold value or range of values representative of a predetermined amount of one or more of the water, the carbon-containing feedstock, or the total liquid in the reservoir is reached or exceeded.

4. (Original) The fuel processing system of claim 1, wherein the sensor assembly is adapted to detect a first triggering event related to the quantity of a first one of the water or the carbon-containing feedstock present in the reservoir, and a second triggering event

related to the quantity of either a second one of the water or the carbon-containing feedstock or the total amount of water and carbon-containing feedstock present in the reservoir.

5. (Original) The fuel processing system of claim 4, wherein each of the triggering events includes a measurable event in which a predetermined threshold value or range of values representative of a predetermined amount of one or more of the water, the carbon-containing feedstock, or the total liquid in the reservoir is reached or exceeded.

6. (Original) The fuel processing system of claim 1, wherein the feedstock delivery system is adapted to produce a feed stream containing a stoichiometric mix ratio of water to carbon-containing feedstock.

7. (Currently Amended) The fuel processing system of claim ~~6~~1, wherein the feedstock delivery system is adapted to produce a feed stream containing greater than a stoichiometric mix ratio of water to carbon-containing feedstock.

8. (Currently Amended) The fuel processing system of claim ~~6~~7, wherein the feedstock delivery system is adapted to produce a feed stream containing 10-50% more water than a stoichiometric mix ratio of water to carbon-containing feedstock.

9. (Currently Amended) The fuel processing system of claim ~~6~~7, wherein the feedstock delivery system is adapted to produce a feed stream containing at least

approximately 100% more water than a stoichiometric mix ratio of water to carbon-containing feedstock.

10. (Original) The fuel processing system of claim 1, wherein the sensor assembly includes at least one sensor external the reservoir.

11. (Original) The fuel processing system of claim 1, wherein the sensor assembly includes at least one sensor internal the reservoir.

12. (Original) The fuel processing system of claim 1, wherein the sensor assembly includes at least one sensor located partially within the reservoir and partially external the reservoir.

13. (Original) The fuel processing system of claim 1, wherein the sensor assembly includes at least one gravimetric sensor.

14. (Original) The fuel processing system of claim 1, wherein the sensor assembly includes at least one volumetric sensor.

15. (Original) The fuel processing system of claim 1, wherein the sensor assembly includes at least one physical property sensor adapted to measure at least one physical property of liquid in the reservoir.

16. (Original) The fuel processing system of claim 15, wherein the physical property sensor includes a refractive index sensor.

17. (Original) The fuel processing system of claim 15, wherein the physical property sensor includes a densitometer.

18. (Original) The fuel processing system of claim 15, wherein the physical property sensor includes a viscometer.

19. (Original) The fuel processing system of claim 15, wherein the physical property sensor includes a spectrophotometer.

20. (Original) The fuel processing system of claim 15, wherein the physical property sensor includes an electrical conductivity sensor.

21. (Original) The fuel processing system of claim 1, wherein the reservoir includes at least one partition adapted to segregate the reservoir into at least two regions, and further wherein the sensor assembly includes at least one sensor adapted to detect the volume of liquid in each region.

22. (Original) The fuel processing system of claim 21, wherein at least one of the regions includes a neck having a reduced cross-sectional area compared to the rest of the region.

23. (Original) The fuel processing system of claim 22, wherein the sensor assembly is adapted to detect the volume of liquid in the neck of the at least one region that includes a neck having a reduced cross-sectional area.

24. (Original) The fuel processing system of claim 22, wherein the reservoir includes at least two regions that each include a neck having a reduced cross-sectional area compared to the rest of the region.

25. (Original) The fuel processing system of claim 1, wherein the reservoir has a capacity and includes a vent assembly adapted to contain liquid exceeding the capacity of the reservoir and to deliver the liquid exceeding the capacity of the reservoir to a containment structure.

26. (Original) The fuel processing system of claim 1, wherein the reservoir includes a mixing device adapted to promote mixing of the carbon-containing feedstock and the water in the reservoir.

27. (Original) The fuel processing system of claim 1, wherein the system further includes a second reservoir adapted to receive the feed stream from the reservoir prior to delivery of the feed stream to the fuel processor.

28. (Original) The fuel processing system of claim 27, wherein the second reservoir includes a second sensor assembly associated with the second reservoir and adapted to detect at least one triggering event related to the quantity of the feed stream in the second reservoir.

29. (Original) The fuel processing system of claim 27, wherein the second reservoir includes a mixing device adapted to promote mixing of the carbon-containing feedstock and the water in the feed stream.

30. (Original) The fuel processing system of claim 1, wherein the carbon-containing feedstock is selected to be soluble in water.

31. (Original) The fuel processing system of claim 1, wherein the carbon-containing feedstock is selected to form an emulsion with water.

32. (Original) The fuel processing system of claim 31, wherein the carbon-containing feedstock further includes a surfactant.

33. (Original) The fuel processing system of claim 31, wherein the reservoir includes an emulsion-producing device adapted to produce an emulsion of the water and the carbon-containing feedstock.

34. (Currently Amended) The fuel processing system of claim 1, wherein the feedstock delivery system further includes a controller adapted to regulate the flow of the streams into the reservoir at least partially in response to the at least one triggering event detected by the sensor assembly.

35. (Original) The fuel processing system of claim 34, wherein the controller is a computerized controller.

36. (Original) The fuel processing system of claim 34, wherein the controller is adapted to monitor selected operating parameters of the fuel processing system and to regulate the operation of the feedstock delivery system at least partially in response thereto.

37. (Original) The fuel processing system of claim 36, wherein the operating parameters include elapsed time after at least one of the water or the carbon-containing feedstock begins to be delivered to the reservoir.

38. (Currently Amended) The fuel processing system of claim 34, wherein the feedstock delivery system includes a plurality of flow-regulating devices, and further wherein

the controller is adapted to control the operation of the flow-regulating devices at least partially in response to the at least one triggering event detected by the sensor assembly.

39. (Currently Amended) The fuel processing system of claim 38, wherein each of the at least one triggering event includes a measurable event in which a predetermined threshold value or range of values representative of a predetermined amount of one or more of the water, the carbon-containing feedstock, or the total liquid in the reservoir is reached or exceeded.

40. (Original) The fuel processing system of claim 35, wherein the controller includes a memory portion adapted to store a plurality of predetermined threshold values corresponding to a predetermined mix ratio of water and carbon-containing feedstock.

41. (Original) The fuel processing system of claim 40, wherein the controller includes a memory portion adapted to store a second plurality of predetermined threshold values corresponding to a second predetermined mix ratio of water and carbon-containing feedstock.

42. (Original) The fuel processing system of claim 34, wherein the feedstock delivery system further includes a user interface in communication with the controller, and further wherein the controller is adapted to regulate the flow of the streams into the reservoir at least partially in response to user inputs to the user interface.

43. (Original) The fuel processing system of claim 42, wherein the user interface is adapted to receive user inputs selecting the predetermined mix ratio.

44. (Original) The fuel processing system of claim 43, wherein the controller is adapted to display to the user via the user interface a plurality of predetermined mix ratios and to receive a user input selecting one of the plurality of predetermined mix ratios.

45. (Original) The fuel processing system of claim 1, wherein the reforming region is adapted to produce a mixed gas stream containing hydrogen gas and other gases from the feed stream and the fuel processor further includes a separation region adapted to separate the mixed gas stream into a product stream containing at least substantially pure hydrogen gas and a byproduct stream containing at least a substantial portion of the other gases.

46. (Original) The fuel processing system of claim 45, wherein the separation region includes at least one hydrogen-selective metal membrane.

47. (Original) The fuel processing system of claim 46, wherein the separation region includes a plurality of generally planar hydrogen-selective metal membranes.

48. (Original) The fuel processing system of claim 46, wherein the separation region includes at least one tubular hydrogen-selective metal membrane.

49. (Original) The fuel processing system of claim 45, wherein the separation region is in fluid communication with a polishing catalyst bed including a methanation catalyst.

50. (Currently Amended) The fuel processing system of claim 1, further comprising a fuel cell stack adapted to receive at least a portion of the product ~~hydrogen~~ stream and to produce an electric current therefrom.

51. (Original) The fuel processing system of claim 50, further comprising at least one energy-consuming device adapted to draw at least a portion of the electric current produced by the fuel cell stack.

52. (Currently amended) A fuel processing system, comprising:

a fuel processor having a reforming region;

a feedstock delivery system adapted to deliver a ~~substantially liquid~~ feed stream containing a predetermined mix ratio of feedstock components to ~~a~~ the fuel processor, the feedstock delivery system comprising:

a water delivery assembly adapted to provide a stream comprising liquid water;

a carbon-containing feedstock delivery assembly adapted to provide a stream comprising a liquid carbon-containing feedstock;

a reservoir adapted to receive a volume of liquid water and a volume of liquid carbon-containing feedstock from the water and the carbon-containing feedstock delivery assemblies;

means for producing ~~an at least substantially liquid~~ the feed stream containing a predetermined mix ratio of the liquid water and the liquid carbon-containing feedstock, wherein the means for producing includes means for detecting the occurrence of at least one triggering event related to the quantity of one or more of the feedstock components in the reservoir; and

~~a~~ wherein the fuel processor ~~having a reforming region and~~ is adapted to produce a product stream containing hydrogen gas from the feed stream.

53. (Original) The fuel processing system of claim 52, wherein the means for producing are adapted to produce a feed stream containing a stoichiometric mix ratio of water to carbon-containing feedstock.

54. (Currently Amended) The fuel processing system of claim ~~53~~52, wherein the means for producing are adapted to produce a feed stream containing a greater than a stoichiometric mix ratio of water to carbon-containing feedstock.

55. (Currently Amended) The fuel processing system of claim ~~53~~54, wherein the means for producing are adapted to produce a feed stream containing at least 10% greater water than a stoichiometric mix ratio of water to carbon-containing feedstock.

56. (Currently Amended) The fuel processing system of claim ~~53~~54, wherein the means for producing are adapted to produce a feed stream containing at least 50% greater water than a stoichiometric mix ratio of water to carbon-containing feedstock.

57. (Canceled)

58. (Original) The fuel processing system of claim ~~57~~ 52, wherein the means for detecting are adapted to detect a first triggering event related to the quantity of a first one of the water or the carbon-containing feedstock delivered to the reservoir, and a second triggering event related to the quantity of either a second one of the water or the carbon-containing feedstock or the total amount of water and carbon-containing feedstock delivered to the reservoir.

59. (Original) The fuel processing system of claim ~~57~~ 52, further including means for controlling the operation of the fuel processing system at least partially in response to the detection of the at least one triggering event.

60. (Original) The fuel processing system of claim 52, wherein the carbon-containing feedstock is adapted to form an emulsion with the water, and the reservoir includes means for producing an emulsion from the water and the carbon-containing feedstock.

61. (Currently Amended) A batch method for producing a feed stream for a fuel processor, the method comprising:

delivering a first ~~at least substantially~~ liquid feedstock component until a sensor assembly detects the occurrence of a first triggering event corresponding to a predetermined amount of the first feedstock component;

delivering a second ~~at least substantially~~ liquid feedstock component until a sensor assembly detects the occurrence of a second triggering event corresponding to at least one of a predetermined amount of the second feedstock component ~~and~~ or a predetermined property of a mixture of the first and the second feedstock components;

delivering a feed stream containing the first and the second ~~at least substantially~~ liquid feedstock components as a feed stream to a fuel processor containing a reforming region; ~~and~~

producing a product hydrogen stream containing hydrogen gas from the feed stream; and,

wherein the first liquid feedstock component comprises a first one of water or a carbon-containing feedstock, and further wherein the second liquid feedstock component comprises a second one of water or a carbon-containing feedstock.

62. (Original) The method of claim 61, wherein the method further includes the step of mixing the first and the second feedstock components prior to delivering the first and the second feedstock components as a feed stream to the fuel processor.

63. (Original) The method of claim 62, wherein the method further includes the step of forming an emulsion from the first and the second feedstock components prior to delivering the first and the second feedstock components as a feed stream to the fuel processor.

64. (Original) The method of claim 62, wherein prior to delivering the first and the second feedstock components as a feed stream to the fuel processor, the method further includes the step of delivering the first and second components to a reservoir.

65. (Original) The method of claim 64, wherein prior to delivering the first and the second feedstock components as a feed stream to the fuel processor, the method further includes the step of delivering the first and second components to a second reservoir.

66. (Currently Amended) A method for producing hydrogen gas, comprising:

delivering a first ~~substantially-~~liquid feedstock component to a mixing chamber including a sensor assembly adapted to detect at least a first and second predetermined triggering event, until the sensor assembly detects the first triggering event;

delivering a second ~~substantially-~~liquid feedstock component to the mixing chamber until the sensor assembly detects the second triggering event;

withdrawing from the mixing chamber ~~an at least substantially~~ a liquid stream containing a predetermined mix ratio of the first and the second liquid feedstock components; ~~and~~

delivering at least a portion of the liquid stream to a fuel processor having a reforming region and adapted to produce a product stream containing hydrogen gas therefrom and,

wherein the first liquid feedstock component comprises a first one of water or a carbon-containing feedstock, and further wherein the second liquid feedstock component comprises a second one of water or a carbon-containing feedstock.

67. (Currently Amended) The fuel processing system of claim 1, wherein the fuel processing system includes means for vaporizing the ~~at least substantially liquid~~ feed stream produced in the feedstock delivery system.

68. (Previously Presented) The fuel processing system of claim 2, wherein the first triggering event is related to a volumetric quantity of the first one of the water or the carbon-containing feedstock delivered to the reservoir.

69. (Previously Presented) The fuel processing system of claim 2, wherein the first triggering event is related to a gravimetric quantity of the first one of the water or the carbon-containing feedstock delivered to the reservoir.

70. (Previously Presented) The fuel processing system of claim 2, wherein the second triggering event is related to a volumetric quantity of either the second one of the water

or the carbon-containing feedstock delivered to the reservoir or the total amount of water and carbon-containing feedstock delivered to the reservoir.

71. (Previously Presented) The fuel processing system of claim 2, wherein the second triggering event is related to a gravimetric quantity of either the second one of the water or the carbon-containing feedstock delivered to the reservoir or the total amount of water and carbon-containing feedstock delivered to the reservoir.

72. (Previously Presented) The fuel processing system of claim 4, wherein the first triggering event is related to a volumetric quantity of the first one of the water or the carbon-containing feedstock present in the reservoir.

73. (Previously Presented) The fuel processing system of claim 4, wherein the first triggering event is related to a gravimetric quantity of the first one of the water or the carbon-containing feedstock present in the reservoir.

74. (Previously Presented) The fuel processing system of claim 4, wherein the second triggering event is related to a volumetric quantity of either the second one of the water or the carbon-containing feedstock present in the reservoir or the total amount of water and carbon-containing feedstock present in the reservoir.

75. (Previously Presented) The fuel processing system of claim 4, wherein the second triggering event is related to a gravimetric quantity of either the second one of the water or the carbon-containing feedstock present in the reservoir or the total amount of water and carbon-containing feedstock present in the reservoir.

76. (Currently Amended) The fuel processing system of claim 45, wherein the separation region is adapted to separate the mixed gas stream into the product stream and the byproduct streams via a pressure swing adsorption process.

77. (Currently Amended) The fuel processing system of claim 52, wherein the fuel processing system further includes means for vaporizing the ~~at least substantially liquid~~ feed stream produced in the feedstock delivery system.

78. (Previously Presented) The fuel processing system of claim 52, wherein the means for producing includes gravimetric means for producing.

79. (Previously Presented) The fuel processing system of claim 52, wherein the means for producing includes volumetric means for producing.

80. (Previously Presented) The method of claim 61, wherein the predetermined amounts correspond to predetermined volumetric amounts of the first and the second feedstock components.

81. (Previously Presented) The method of claim 61, wherein the predetermined amounts correspond to predetermined gravimetric amounts of the first and the second feedstock components.

82. (Previously Presented) The method of claim 66, wherein the first triggering event is related to a volumetric quantity of the first feedstock component delivered to or present in the reservoir.

83. (Previously Presented) The method of claim 66, wherein the first triggering event is related to a gravimetric quantity of the first feedstock component delivered to or present in the reservoir.

84. (Currently Amended) The method of claim 66, wherein the second triggering event is related to a volumetric quantity of the second feedstock component delivered to ~~or present in~~ the reservoir.

85. (Currently Amended) The method of claim 66, wherein the second triggering event is related to a gravimetric quantity of the second feedstock component delivered to ~~or present in~~ the reservoir.

86. (Currently Amended) The method of claim 66, wherein the method further includes vaporizing the ~~at least substantially~~ liquid stream withdrawn from the mixing chamber.

Allowable Subject Matter

Claims 1-56 and 58-86 are allowed.

The following is an examiner's statement of reasons for allowance: the claims are directed toward a fuel processing system wherein a feedstock delivery system delivers a feed stream to a fuel processor. The feedstock delivery system comprises a water delivery assembly, a carbon-containing feedstock delivery assembly, a reservoir and a sensor assembly. Liquid water and liquid carbon-containing feedstock are delivered to and mixed in the reservoir. The sensor assembly detects at least one triggering event related to the quantity of water or carbon-containing feedstock delivered to the reservoir.

The prior art does not teach the claimed invention. Edlund '906 does not teach both the water stream and the carbon-containing stream are liquid when added to the reservoir and remain liquid when the mixed liquid streams exit the reservoir to be delivered to the fuel processor. In col. 3, lines 61-col. 4, lines 7 and col. 4, lines 53-57 Edlund teaches a gaseous carbon-containing feedstock is bubbled through a water reservoir and that stream 40 (carbon-containing) is vaporized prior to mixing with the water in the reservoir. Therefore, Edlund '906 does not teach a feed stream containing a mixture of liquid water and liquid carbon-containing feedstock exits the reservoir and is delivered to the fuel processor to produce a product stream containing hydrogen. Edlund teaches against mixing liquid water and hydrocarbon feedstocks because

hydrocarbons are immiscible with water. Edlund teaches "carbon-containing feedstock and water must be mixed as a vapor" (col. 3, lines 47-51).

US 2002/0119353 has been reviewed. There is no double patenting between the presently claimed invention and US 2002/0119353. US 2002/0119353 claims a pump assembly used to mix a ratio of water and liquid carbon-containing feedstock prior to delivery to the fuel processor (see claims 1-4 and 10-12). US 2002/0119353 does not claim a sensor assembly associated with a reservoir. The presently claimed invention does not recite a pump assembly. Claim 52 has been amended to recite the "means for producing" includes "means for detecting the occurrence of at least one triggering event related to the quantity of one or more of the feedstock components in the reservoir". Therefore, there is no double patenting regarding claim 52 and US 2002/0119353 because the publication does not claim the "means for detecting" recited by the presently claimed invention.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tracy Dove whose telephone number is 571-272-1285. The examiner can normally be reached on Monday-Thursday (9:00-7:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pat Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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